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Conference Abstract

Outcomes of the International Oceanographic Data and Information Exchange Ocean Biogeographic Information System OBIS-Event-Data Workshop on Animal Tagging and Tracking

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Abstract

The Ocean Biogeographic Information System (OBIS) began in 2000 as the repository for data from the Census of Marine Life. Since that time, OBIS has expanded its goals beyond simply hosting data to supporting more aspects of marine conservation (Pooter et al. 2017). In order to accomplish those goals, the OBIS secretariat in partnership with its European node (EurOBIS) hosted at the Flanders Marine Institute (VLIZ, Belgium), and the Intergovernmental Oceanographic Commission (IOC) Committee on International

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Oceanographic Data and Information Exchange (IODE, 23rd session, March 2015, Brugge) established a 2-year pilot project to address a particularly problematic issue that environmental data collected as part of marine biological research were being disassociated from the biological data. OBIS-Event-Data is the solution that was developed from that pilot project, which devised a method for keeping environmental data together with the biological data (Pooter et al. 2017).

OBIS is seeking early adopters of the new data standard OBIS-Event-Data from among the marine biodiversity monitoring communities, to further validate the data standard, and develop data products and scientific applications to support the enhancement of Biological and Ecosystem Essential Ocean Variables (EOVs) in the framework of the Global Ocean Observing System (GOOS) and the Marine Biodiversity Observation Network of the Group on Earth Observations (GEO BON MBON).

After the successful 2-year IODE pilot project OBIS-ENV-DATA, the IOC established a new 2-year IODE pilot project OBIS-Event-Data for Scientific Applications (2017-2019). The OBIS-Event-Data data standard, building on Darwin Core, provides a technical solution for combined biological and environmental data, and incorporates details about sampling methods and effort, including event hierarchy. It also implements standardization of parameters involved in biological, environmental, and sampling details using an international standard controlled vocabulary (British Oceanographic Data Centre Natural Environment Research Council).

A workshop organized by IODE/OBIS in April brought together major animal tagging and tracking networks such as the Ocean Tracking Network (OTN), the Animal Telemetry Network (ATN), the Integrated Marine Observing System (IMOS), the European Tracking Network (ETN) and the Acoustic Tracking Array Platform (ATAP) to test the OBIS-Event-Data standard through the development of some data products and science applications. Additionally, this workshop contributes to the further maturation of the GOOS EOV on fish as well as the EOV on birds, mammals and turtles.

We will present the outcomes as well as any lessons learned from this workshop on problems, solutions, and applications of using Darwin Core/OBIS-Event-Data for bio-logging data.

Keywords

Event Core, telemetry data, biological data, environmental data

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